

***Initial Parameter List For Sensitivity/Uncertainty Analysis And Output DSN from the UCI file,
 ***Following Output IDs are the first two ID read from the EXT TARGET block of the UCI file. You can add more,
 ***Locations,RCH630,RCH635,RCH637,RCH640,RCH650,RCH660,RCH670,RCH800,RCH810,RCH820,
 RCH830,RCH840,RCH850,RCH860,RCH870,RCH880,RCH890,RCH900,

 DSN,6320,9635,9637,6420,9650,9660,9670,9800,9810,9820,9830,9840,9850,9860,8690,9880,8907,990
 0,
 ***The operation number, land use, tied with next, and multiplier can be left blank",
 ParmID,OPN_Type,Table_Name,Parm_Name,Occur_Or_MLNumber,Mult_Factor_FG,OPN_Number_Or_Name,Lower_Limit,Upper_Limit,Comments (This column will be ignored by HSPEXP+),
 1.,MASS-LINK,PQUAL:POQUAL:3:0:INFLOW:NUIF1:4:0,2,1,,,PO4 MASS
 Link,,
 2.,MASS-LINK,PQUAL:POQUAL:1:0:INFLOW:NUIF1:2:0,2,1,,,NO3 MASS
 Link,,
 3.,MASS-LINK,PQUAL:POQUAL:2:0:INFLOW:NUIF1:1:0,2,1,,,TAM MASS
 LINK,,
 4.,MASS-LINK,PQUAL:POQUAL:4:0:INFLOW:OXIF:2:0,2,1,,,BOD MASS
 Link,,
 5.,MASS-LINK,PQUAL:POQUAL:4:0:INFLOW:PKIF:3:0,2,1,,,OrgN MASS
 Link,,
 6.,MASS-LINK,PQUAL:POQUAL:4:0:INFLOW:PKIF:4:0,2,1,,,OrgP MASS
 Link,,
 7.,MASS-LINK,PQUAL:POQUAL:4:0:INFLOW:PKIF:5:0,2,1,,,OrgC MASS
 Link,,
 8.,MASS-LINK,PHOS:TSP4S:1:0:INFLOW:NUIF1:4:0,5,1,,,PO4 Surface water
 Outflow,,
 9.,MASS-LINK,PHOS:TSP4S:5:0:INFLOW:NUIF1:4:0,5,1,,,PO4 Surface water Outflow with water from upper layer storage,,
 10.,MASS-LINK,PHOS:SSP4S:3:0:INFLOW:NUIF1:4:0,5,1,,,PO4 outflow with water from active groundwater,,
 11.,MASS-LINK,PHOS:SEDP:2:0:INFLOW:NUIF2:2:2,5,1,,,adsorbed
 PO4,,
 12.,MASS-LINK,PHOS:SEDP:2:0:INFLOW:NUIF2:3:2,5,1,,,adsorbed
 PO4,,
 13.,MASS-
 LINK,NITR:PONO3:0:0:INFLOW:NUIF1:1:0,5,1,,,Nitrate,,

 14.,MASS-LINK,NITR:TSAMS:1:0:INFLOW:NUIF1:2:0,5,1,,,Dissolved
 NH3,,
 15.,MASS-LINK,NITR:TSAMS:5:0:INFLOW:NUIF1:2:0,5,1,,,Dissolved
 NH3,,
 16.,MASS-LINK,NITR:SSAMS:3:0:INFLOW:NUIF1:2:0,5,1,,,Dissolved
 NH3,,
 17.,MASS-LINK,NITR:SEDN:2:0:INFLOW:NUIF2:2:1,5,1,,,adsorbed
 NH3,,
 18.,MASS-LINK,NITR:SEDN:2:0:INFLOW:NUIF2:3:1,5,1,,,adsorbed
 NH3,,
 19.,MASS-LINK,NITR:POORN:0:0:INFLOW:PKIF:3:0,5,1,,,Refractory Organic
 N,,
 20.,MASS-LINK,NITR:POORN:0:0:INFLOW:OXIF:2:0,5,1,,,Labile Org

N,,MASS-LINK,PHOS:SEDP:1:0:INFLOW:PKIF:4:0,5,1,,,Refractory Organic
P,,MASS-LINK,NITR:POORN:0:0:INFLOW:PKIF:5:0,5,1,,,Refractory Organic
C,,MASS-LINK,IQUAL:SOQUAL:3:0:INFLOW:NUIF1:4:0,1,1,,,PO4 MASS
Link,,MASS-LINK,IQUAL:SOQUAL:1:0:INFLOW:NUIF1:2:0,1,1,,,NO3 MASS
Link,,MASS-LINK,IQUAL:SOQUAL:2:0:INFLOW:NUIF1:1:0,1,1,,,TAM MASS
LINK,,MASS-LINK,IQUAL:SOQUAL:4:0:INFLOW:OXIF:2:0,1,1,,,BOD MASS
LINK,,MASS-LINK,IQUAL:SOQUAL:4:0:INFLOW:PKIF:3:0,1,1,,,OrgN MASS
LINK,,MASS-LINK,IQUAL:SOQUAL:4:0:INFLOW:PKIF:4:0,1,1,,,OrgP MASS
LINK,,MASS-LINK,IQUAL:SOQUAL:4:0:INFLOW:PKIF:5:0,1,1,,,OrgC MASS
LINK,,Point,EXTNL-SOURCES,NUIF1:4:0,,1,304,,Point Source of
PO4,,Point,EXTNL-SOURCES,NUIF1:1:0,,1,304,,Point Source of
NO3,,Point,EXTNL-SOURCES,NUIF1:2:0,,1,304,,Point Source of
TAM,,Point,EXTNL-SOURCES,OXIF:2:0,,1,304,,Point Source of
BOD,,Point,EXTNL-SOURCES,PKIF:3:0,,1,304,,Point source of
OrgN,,Point,EXTNL-SOURCES,PKIF:4:0,,1,304,,Point Source of
OrgP,,Point,EXTNL-SOURCES,PKIF:5:0,,1,304,,Point Source of
OrgC,,Point,EXTNL-SOURCES,NUIF1:4:0,,1,408,,Point Source of
PO4,,Point,EXTNL-SOURCES,NUIF1:1:0,,1,408,,Point Source of
NO3,,Point,EXTNL-SOURCES,NUIF1:2:0,,1,408,,Point Source of
TAM,,Point,EXTNL-SOURCES,OXIF:2:0,,1,408,,Point Source of
BOD,,Point,EXTNL-SOURCES,PKIF:3:0,,1,408,,Point source of
OrgN,,Point,EXTNL-SOURCES,PKIF:4:0,,1,408,,Point Source of
OrgP,,Point,EXTNL-SOURCES,PKIF:5:0,,1,408,,Point Source of
OrgC,,Point,EXTNL-SOURCES,NUIF1:4:0,,1,308,,Point Source of
PO4,,Point,EXTNL-SOURCES,NUIF1:1:0,,1,308,,Point Source of
NO3,,Point,EXTNL-SOURCES,NUIF1:2:0,,1,308,,Point Source of
TAM,,Point,EXTNL-SOURCES,OXIF:2:0,,1,308,,Point Source of
BOD,,Point,EXTNL-SOURCES,PKIF:3:0,,1,308,,Point source of

OrgN,,
49,Point,EXTNL-SOURCES,PKIF:4:0,,1,308,,Point Source of
OrgP,,
50,Point,EXTNL-SOURCES,PKIF:5:0,,1,308,,Point Source of
OrgC,,
51,Point,EXTNL-SOURCES,NUIF1:4:0,,1,204,,Point Source of
PO4,,
52,Point,EXTNL-SOURCES,NUIF1:1:0,,1,204,,Point Source of
NO3,,
53,Point,EXTNL-SOURCES,NUIF1:2:0,,1,204,,Point Source of
TAM,,
54,Point,EXTNL-SOURCES,OXIF:2:0,,1,204,,Point Source of
BOD,,
55,Point,EXTNL-SOURCES,PKIF:3:0,,1,204,,Point source of
OrgN,,
56,Point,EXTNL-SOURCES,PKIF:4:0,,1,204,,Point Source of
OrgP,,
57,Point,EXTNL-SOURCES,PKIF:5:0,,1,204,,Point Source of
OrgC,,
58,Point,EXTNL-SOURCES,NUIF1:4:0,,1,102,,Point Source of
PO4,,
59,Point,EXTNL-SOURCES,NUIF1:1:0,,1,102,,Point Source of
NO3,,
60,Point,EXTNL-SOURCES,NUIF1:2:0,,1,102,,Point Source of
TAM,,
61,Point,EXTNL-SOURCES,OXIF:2:0,,1,102,,Point Source of
BOD,,
62,Point,EXTNL-SOURCES,PKIF:3:0,,1,102,,Point source of
OrgN,,
63,Point,EXTNL-SOURCES,PKIF:4:0,,1,102,,Point Source of
OrgP,,
64,Point,EXTNL-SOURCES,PKIF:5:0,,1,102,,Point Source of
OrgC,,
65,Point,EXTNL-SOURCES,NUIF1:4:0,,1,703,,Point Source of
PO4,,
66,Point,EXTNL-SOURCES,NUIF1:1:0,,1,703,,Point Source of
NO3,,
67,Point,EXTNL-SOURCES,NUIF1:2:0,,1,703,,Point Source of
TAM,,
68,Point,EXTNL-SOURCES,OXIF:2:0,,1,703,,Point Source of
BOD,,
69,Point,EXTNL-SOURCES,PKIF:3:0,,1,703,,Point source of
OrgN,,
70,Point,EXTNL-SOURCES,PKIF:4:0,,1,703,,Point Source of
OrgP,,
71,Point,EXTNL-SOURCES,PKIF:5:0,,1,703,,Point Source of
OrgC,,
72,Point,EXTNL-SOURCES,NUIF1:4:0,,1,506,,Point Source of
PO4,,
73,Point,EXTNL-SOURCES,NUIF1:1:0,,1,506,,Point Source of
NO3,,
74,Point,EXTNL-SOURCES,NUIF1:2:0,,1,506,,Point Source of
TAM,,
75,Point,EXTNL-SOURCES,OXIF:2:0,,1,506,,Point Source of
BOD,,
76,Point,EXTNL-SOURCES,PKIF:3:0,,1,506,,Point source of

OrgN,,
77,Point,EXTNL-SOURCES,PKIF:4:0,,1,506,,,Point Source of
OrgP,,
78,Point,EXTNL-SOURCES,PKIF:5:0,,1,506,,,Point Source of
OrgC,,
79,Point,EXTNL-SOURCES,NUIF1:4:0,,1,420,,,Point Source of
PO4,,
80,Point,EXTNL-SOURCES,NUIF1:1:0,,1,420,,,Point Source of
NO3,,
81,Point,EXTNL-SOURCES,NUIF1:2:0,,1,420,,,Point Source of
TAM,,
82,Point,EXTNL-SOURCES,OXIF:2:0,,1,420,,,Point Source of
BOD,,
83,Point,EXTNL-SOURCES,PKIF:3:0,,1,420,,,Point source of
OrgN,,
84,Point,EXTNL-SOURCES,PKIF:4:0,,1,420,,,Point Source of
OrgP,,
85,Point,EXTNL-SOURCES,PKIF:5:0,,1,420,,,Point Source of
OrgC,,
86,Point,EXTNL-SOURCES,NUIF1:4:0,,1,324,,,Point Source of
PO4,,
87,Point,EXTNL-SOURCES,NUIF1:1:0,,1,324,,,Point Source of
NO3,,
88,Point,EXTNL-SOURCES,NUIF1:2:0,,1,324,,,Point Source of
TAM,,
89,Point,EXTNL-SOURCES,OXIF:2:0,,1,324,,,Point Source of
BOD,,
90,Point,EXTNL-SOURCES,PKIF:3:0,,1,324,,,Point source of
OrgN,,
91,Point,EXTNL-SOURCES,PKIF:4:0,,1,324,,,Point Source of
OrgP,,
92,Point,EXTNL-SOURCES,PKIF:5:0,,1,324,,,Point Source of
OrgC,,
***The parameters below are for the locations in
Oklahoma,,
93,,MASS-LINK,PQUAL:POQUAL:3:0:INFLOW:NUIF1:4:0,21,1,,,PO4 MASS
Link,,
94,,MASS-LINK,PQUAL:POQUAL:1:0:INFLOW:NUIF1:2:0,21,1,,,NO3 MASS
Link,,
95,,MASS-LINK,PQUAL:POQUAL:2:0:INFLOW:NUIF1:1:0,21,1,,,TAM MASS
LINK,,
96,,MASS-LINK,PQUAL:POQUAL:4:0:INFLOW:OXIF:2:0,21,1,,,BOD MASS
LINK,,
97,,MASS-LINK,PQUAL:POQUAL:4:0:INFLOW:PKIF:3:0,21,1,,,OrgN MASS
LINK,,
98,,MASS-LINK,PQUAL:POQUAL:4:0:INFLOW:PKIF:4:0,21,1,,,OrgP MASS
LINK,,
99,,MASS-LINK,PQUAL:POQUAL:4:0:INFLOW:PKIF:5:0,21,1,,,OrgC MASS
LINK,,
100,,MASS-LINK,PHOS:TSP4S:1:0:INFLOW:NUIF1:4:0,51,1,,,PO4 Surface water
Outflow,,
101,,MASS-LINK,PHOS:TSP4S:5:0:INFLOW:NUIF1:4:0,51,1,,,PO4 Surface water Outflow with water
from upper layer
storage,,
102,,MASS-LINK,PHOS:SSP4S:3:0:INFLOW:NUIF1:4:0,51,1,,,PO4 outflow with water from active

groundwater,,,...,103,,MASS-LINK,PHOS:SEDP:2:0:INFLOW:NUIF2:2:2,51,1,,,adsorbed
PO4,,,...,104,,MASS-LINK,PHOS:SEDP:2:0:INFLOW:NUIF2:3:2,51,1,,,adsorbed
PO4,,,...,105,,MASS-
LINK,NITR:PONO3:0:0:INFLOW:NUIF1:1:0,51,1,,,Nitrate,,,...,
.....,106,,MASS-LINK,NITR:TSAMS:1:0:INFLOW:NUIF1:2:0,51,1,,,Dissolved
NH3,,,...,107,,MASS-LINK,NITR:TSAMS:5:0:INFLOW:NUIF1:2:0,51,1,,,Dissolved
NH3,,,...,108,,MASS-LINK,NITR:SSAMS:3:0:INFLOW:NUIF1:2:0,51,1,,,Dissolved
NH3,,,...,109,,MASS-LINK,NITR:SEDN:2:0:INFLOW:NUIF2:2:1,51,1,,,adsorbed
NH3,,,...,110,,MASS-LINK,NITR:SEDN:2:0:INFLOW:NUIF2:3:1,51,1,,,adsorbed
NH3,,,...,111,,MASS-LINK,NITR:POORN:0:0:INFLOW:PKIF:3:0,51,1,,,Refractory Organic
N,,,...,112,,MASS-LINK,NITR:POORN:0:0:INFLOW:OXIF:2:0,51,1,,,Labile Org
N,,,...,113,,MASS-LINK,PHOS:SEDP:1:0:INFLOW:PKIF:4:0,51,1,,,Refractory Organic
P,,,...,114,,MASS-LINK,NITR:POORN:0:0:INFLOW:PKIF:5:0,51,1,,,Refractory Organic
C,,,...,115,,MASS-LINK,IQUAL:SOQUAL:3:0:INFLOW:NUIF1:4:0,11,1,,,PO4 MASS
Link,,,...,116,,MASS-LINK,IQUAL:SOQUAL:1:0:INFLOW:NUIF1:2:0,11,1,,,NO3 MASS
Link,,,...,117,,MASS-LINK,IQUAL:SOQUAL:2:0:INFLOW:NUIF1:1:0,11,1,,,TAM MASS
LINK,,,...,118,,MASS-LINK,IQUAL:SOQUAL:4:0:INFLOW:OXIF:2:0,11,1,,,BOD MASS
LINK,,,...,119,,MASS-LINK,IQUAL:SOQUAL:4:0:INFLOW:PKIF:3:0,11,1,,,Orgn MASS
LINK,,,...,120,,MASS-LINK,IQUAL:SOQUAL:4:0:INFLOW:PKIF:4:0,11,1,,,OrgP MASS
LINK,,,...,121,,MASS-LINK,IQUAL:SOQUAL:4:0:INFLOW:PKIF:5:0,11,1,,,Orgc MASS
LINK,,,...,122,Point,EXTNL-SOURCES,NUIF1:4:0,,1,809,,Point Source of
PO4,,,...,123,Point,EXTNL-SOURCES,NUIF1:1:0,,1,809,,Point Source of
NO3,,,...,124,Point,EXTNL-SOURCES,NUIF1:2:0,,1,809,,Point Source of
TAM,,,...,125,Point,EXTNL-SOURCES,OXIF:2:0,,1,809,,Point Source of
BOD,,,...,126,Point,EXTNL-SOURCES,PKIF:3:0,,1,809,,Point source of
OrgN,,,...,127,Point,EXTNL-SOURCES,PKIF:4:0,,1,809,,Point Source of
OrgP,,,...,128,Point,EXTNL-SOURCES,PKIF:5:0,,1,809,,Point Source of
OrgC,,,...,129,Point,EXTNL-SOURCES,NUIF1:4:0,,1,516,,Point Source of
PO4,,,...,

130,Point,EXTNL-SOURCES,NUIF1:1:0,,1,516,,,Point Source of
NO3,,
131,Point,EXTNL-SOURCES,NUIF1:2:0,,1,516,,,Point Source of
TAM,,
132,Point,EXTNL-SOURCES,OXIF:2:0,,1,516,,,Point Source of
BOD,,
133,Point,EXTNL-SOURCES,PKIF:3:0,,1,516,,,Point source of
OrgN,,
134,Point,EXTNL-SOURCES,PKIF:4:0,,1,516,,,Point Source of
OrgP,,
135,Point,EXTNL-SOURCES,PKIF:5:0,,1,516,,,Point Source of
OrgC,,
136,Point,EXTNL-SOURCES,NUIF1:4:0,,1,902,,Point Source of
PO4,,
137,Point,EXTNL-SOURCES,NUIF1:1:0,,1,902,,Point Source of
NO3,,
138,Point,EXTNL-SOURCES,NUIF1:2:0,,1,902,,Point Source of
TAM,,
139,Point,EXTNL-SOURCES,OXIF:2:0,,1,902,,Point Source of
BOD,,
140,Point,EXTNL-SOURCES,PKIF:3:0,,1,902,,Point source of
OrgN,,
141,Point,EXTNL-SOURCES,PKIF:4:0,,1,902,,Point Source of
OrgP,,
142,Point,EXTNL-SOURCES,PKIF:5:0,,1,902,,Point Source of
OrgC,,
143,Point,EXTNL-SOURCES,NUIF1:4:0,,1,725,,Point Source of
PO4,,
144,Point,EXTNL-SOURCES,NUIF1:1:0,,1,725,,Point Source of
NO3,,
145,Point,EXTNL-SOURCES,NUIF1:2:0,,1,725,,Point Source of
TAM,,
146,Point,EXTNL-SOURCES,OXIF:2:0,,1,725,,Point Source of
BOD,,
147,Point,EXTNL-SOURCES,PKIF:3:0,,1,725,,Point source of
OrgN,,
148,Point,EXTNL-SOURCES,PKIF:4:0,,1,725,,Point Source of
OrgP,,
149,Point,EXTNL-SOURCES,PKIF:5:0,,1,725,,Point Source of
OrgC,,
Delete intermediate UCI
files?,0,
***Following lines list the multiplication factor for each parameter for each
simulation.,
",",
SimID,Parm1,Parm2,Parm3,Parm4,Parm5,Parm6,Parm7,Parm8,Parm9,Parm10,Parm11,Parm12,Parm
13,Parm14,Parm15,Parm16,Parm17,Parm18,Parm19,Parm20,Parm21,Parm22,Parm23,Parm24,Parm
5,Parm26,Parm27,Parm28,Parm29,Parm30,Parm31,Parm32,Parm33,Parm34,Parm35,Parm36,Parm37,
Parm38,Parm39,Parm40,Parm41,Parm42,Parm43,Parm44,Parm45,Parm46,Parm47,Parm48,Parm49,P
arm50,Parm51,Parm52,Parm53,Parm54,Parm55,Parm56,Parm57,Parm58,Parm59,Parm60,Parm61,P
arm62,Parm63,Parm64,Parm65,Parm66,Parm67,Parm68,Parm69,Parm70,Parm71,Parm72,Parm73,Parm
74,Parm75,Parm76,Parm77,Parm78,Parm79,Parm80,Parm81,Parm82,Parm83,Parm84,Parm85,Parm8
6,Parm87,Parm88,Parm89,Parm90,Parm91,Parm92,Parm93,Parm94,Parm95,Parm96,Parm97,Parm98,
Parm99,Parm100,Parm101,Parm102,Parm103,Parm104,Parm105,Parm106,Parm107,Parm108,Parm10
9,Parm110,Parm111,Parm112,Parm113,Parm114,Parm115,Parm116,Parm117,Parm118,Parm119,Parm
120,Parm121,Parm122,Parm123,Parm124,Parm125,Parm126,Parm127,Parm128,Parm129,Parm130,

